

*Fitting the pieces together . . .*



**Missouri Assistive Technology  
Annual Report  
2002 - 2003**



## Reflections, 1993 - 2003

### We've Come A long Way

by James Jordan, Retiring AT Council Member

In my decade on the Council, I have witnessed changes in assistive technology (AT) and its delivery in this state that rival the change from the horse to the automobile. It is with nothing but pride that I look back on my time on the Council and feel blessed to have served with such a talented and forward thinking group of individuals. We have definitely been a proactive Council that has left Missourians with disabilities in a better position, when it comes to assistive technology, than they were when I was selected as one of the original Council members in 1993.

Ten years ago, this Council focused primarily on introducing Missourians with disabilities to assistive technology. To all corners of the state we went, explaining time and time again what AT is and how it could be beneficial in people's lives. We followed this initiative with the creation of six demonstration sites around the state that provided individuals with the chance to see, try and learn about assistive devices. Yet, in some respects, our efforts seemed to be slightly hypocritical. Here we were introducing individuals to all of these wonderful adapted devices, but in far too many instances, they had no option, due to limited funding, to purchase devices or try them for extended periods of time.

Thus, the Council began shifting its emphasis more toward increasing the number of avenues in which individuals could obtain devices. This was a wonderfully effective move which has culminated in the development of the Telecommunications Access Program for Telephone and Internet, the \$how-Me Loans Program, the Kids Assistive Technology Program, the Equipment Technology Consortium, Swap 'n Shop and the Assistive Technology Reimbursement Program, all of which are further profiled in this annual report. The theme of this report, "fitting the puzzle pieces together" reflects the development and expansion of the Council's programs into a collage of service "pieces" which create more comprehensive access to AT across the state.

My ten years of service to the Council have gone fast and have been most rewarding. While we still have some AT pieces missing and some that could better fit together, Missouri, I feel, has come far in assuring its citizens the best assistive technology access possible.

## Policy Advocacy & Technical Assistance

### Voting Reform

State legislation passed this session that revises Missouri election law to conform to the federal Help America Vote Act (HAVA). Both HAVA and state legislation include several sections related to improving the ability of persons with disabilities to vote independently. The new state law includes a requirement for local election authorities to designate at least one voting site (and up to four additional sites) as an election day central polling place and these site(s) must conform to nationally accepted architectural accessibility standards. Implementation of HAVA also included development of a State Plan. MoAT staff was active on the State Plan Committee in drafting sections relating to accessible voting machines. Staff also drafted the state's grant application for HAVA Section 261 funds to improve voting accessibility for persons with disabilities.

### Information Technology Accessibility Standards

In January 2003, Missouri officially adopted information technology (IT) accessibility standards. As required by state law the standards were jointly adopted by the Assistive Technology Council and the Office of Information Technology. The standards are a modification of the federal Section 508 IT access standards and cover the areas of web, operating systems and software, telecommunications, video and multimedia, desktop and portable computers, and information, documentation and support. Missouri appears to be the first state to undertake comprehensive IT accessibility standards development and adoption to specifically address unique state needs and resources.

### Assistive Technology Special Education Funding

Over \$56,000 was made available for vision-related devices to be added to Missouri's short-term equipment loan program (ETC). The funding was made possible through the combined efforts of MoAT, the Blind Task Force and Missouri's Division of Special Education.

Additional funding, about \$250,000 is expected to be made available again next year from the Division of Special Education to improve the ability of schools to provide assistive technology for school-aged children. More details on this year's AT Reimbursement Program and on ETC, both administered by MoAT, are provided in a later section of the annual report.

### **Disabled Parking laws**

Legislation passed and was signed into law, which makes disabled parking windshield placards renewable for two years. Under prior law the placards had to be renewed each year.

Another bill also passed, but did not become law, which would have increased the penalty for fraudulently using a disabled parking plate or placard. This bill would have also expanded the types of medical practitioners who could certify disabling conditions in order for persons to obtain a disabled plate/placard. The bill also would have increased the penalty for practitioners who fraudulently issued a certificate for a plate/placard. This bill was vetoed by the Governor for issues having to do with provisions not related to disabled parking.

### **Health Insurance Coverage for Hearing Aids**

A bi-partisan effort was again made in the legislature to require health insurers to cover hearing aids for children. Former MoAT Chair Tom Bastean testified before the House Health Care Policy Committee on a bill to provide coverage. This legislation was a MoAT Council priority this year. Many children with hearing impairments go without hearing aids because their insurance does not cover them, resulting in problems with language development and educational achievement. While the two bills that were introduced did not pass, legislation is expected to be introduced again next session.

### **Tax Credit for Home Access Modifications**

Missourians who need to make their homes accessible for themselves or for a family member often find it unaffordable to do so. Passage of legislation to provide a tax credit for individuals to help offset the expenses of home access modifications was a MoAT Council priority in the 2003 session. The bill that was introduced would have provided a tax credit for many types of home access improvements. The state's tough budget year thwarted efforts to pass the bill, however legislation to help ease the expense of making homes accessible is likely to be introduced again in future sessions.

## Training and Individual Assistance

### Power Up Attendee Comments

*"The opening speaker was excellent. I have never enjoyed a conference speaker more!"*

*"Conference Notebook is an outstanding reference!"*

*"The highlight was the involvement of people with disabilities as presenters & participants . . . practical info presented by people who use it!"*

*"Great conference (as usual). Keep up the good work!"*



### Power Up Highlights

MoAT again sponsored Power Up, a statewide AT conference and expo attended by almost 500 participants. Keynote speakers Michael Aronin & Kyle Glozier started and finished the conference & expo with exhilaration, inspiration, and high impact! A special theatrical performance by The DisAbility Project at the Monday evening reception had attendees raving! Recipients of the AT awards were *Julie Ituarte*, Blindness Skills Specialist in Springfield, and *Alisha Criswell*, *Elaine Houtman*, & *Cheryl Snorgrass* of *The Capper Center of Kansas City*.

With 42 exhibitors and 38 sessions, attendees had a plethora of choices and a wealth of experience to learn from. Vendors from across the country demonstrated new technology, and the computer learning lab offered attendees hands-on experience. Visit our website for information on the Power Up 2004 Conference & Expo and come join us!

### Other Training

In addition to Power Up, MoAT staff conducted 22 other training events on assistive technology, reaching 1,361 Missourians.



## Individual Assistance

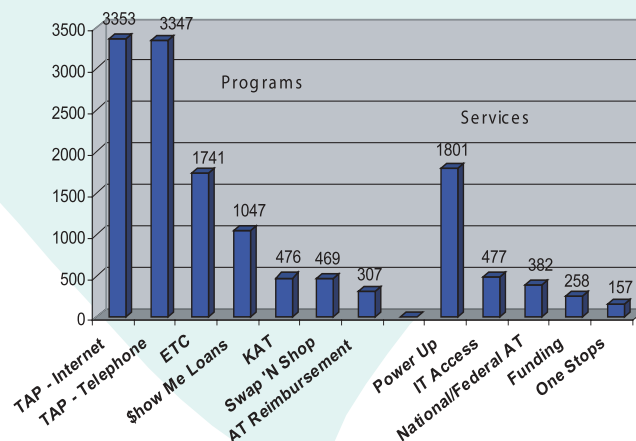
Persons with disabilities and service providers contact Missouri Assistive Technology (MoAT) seeking assistance in obtaining assistive technology, securing device funding, accessing MoAT programs, and gaining disability policy knowledge. During this fiscal year, **MoAT staff handled 16,752 inquiries and requests for assistance by telephone and e-mail.**

## The People Piece

Crossroads Hospice in Kansas City serves individuals who are gravely ill. In the fall of 2002, MoAT staff received a call from a Crossroads employee who was new to assistive technology, but who knew enough to know that assistive technology might be useful in helping individuals maintain the best quality of life possible. Toward that end, MoAT staff has been periodically assisting Crossroads staff with determining appropriate forms of assistive technology to use and have been loaning devices to Crossroads through the ETC program.



**Major Contact Topics**



## Equipment Technology Consortium (ETC)

### The People Piece

*Of the 980 assistive devices offered through ETC, perhaps none has more impact on the lives of individuals than the portable ramps. A family in Columbia that rented a house last year well illustrates the affect the ramps produce. While waiting for a permanent ramp to be built on their home, the family coordinated with Show-Me Tech and Services for Independent Living to borrow a portable ramp via ETC. The loan of the portable ramp made things much easier for the family member with a disability as well as the members of his family. While they were waiting for a permanent ramp to be constructed, the temporary ramp enabled the young man to attend doctor's appointments, complete his physical therapy routine, participate in community activities, and live with the knowledge that, in case of an emergency, he would be able to get out of his house in a quick and safe manner.*

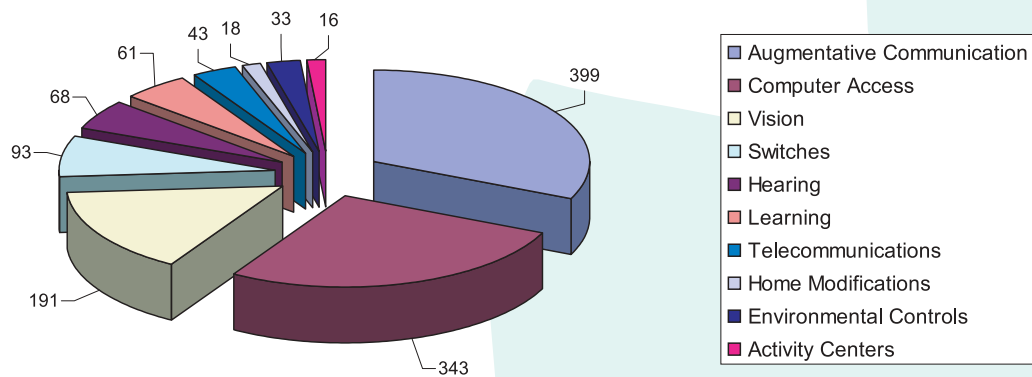
*Furthermore, family members no longer had to lift this family member and carry him in and out, ending the potential danger of a fall to both him and his family.*



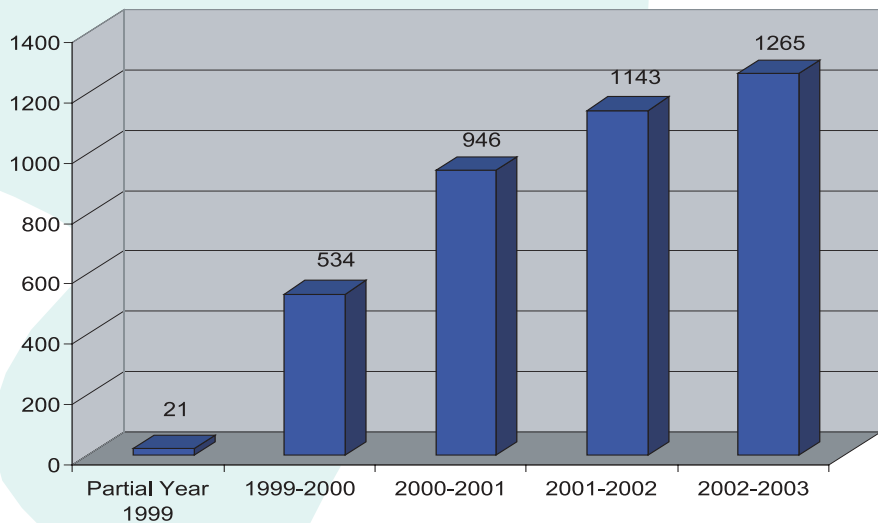
### The Program Piece

In this, its fourth full year of operation, the ETC Program yet again loaned more equipment than in the prior year. Loans made in FY'03 totaled 1,265, an increase of 11% from FY'02. An additional 130 pieces of equipment were added to the inventory, bringing the total to 980, which helps the program maintain an up-to-date selection of devices and provide devices in a timely manner. This year also saw 33 new school districts and agencies joining the program, bringing the total to 384. Strong consumer satisfaction continues to be a hallmark of the ETC program with 98% of borrowers giving the program and its level of service strong marks.

**Devices Loaned by Category**

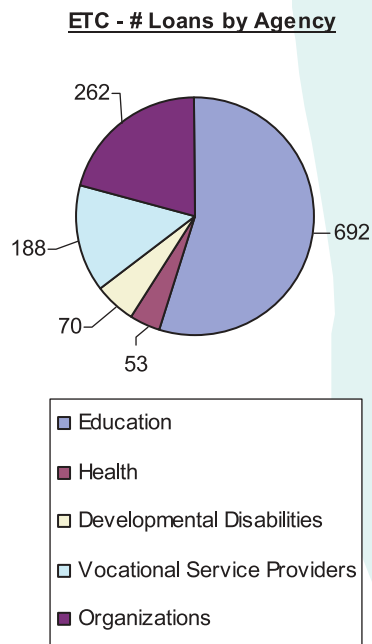


**ETC - Devices Loaned**



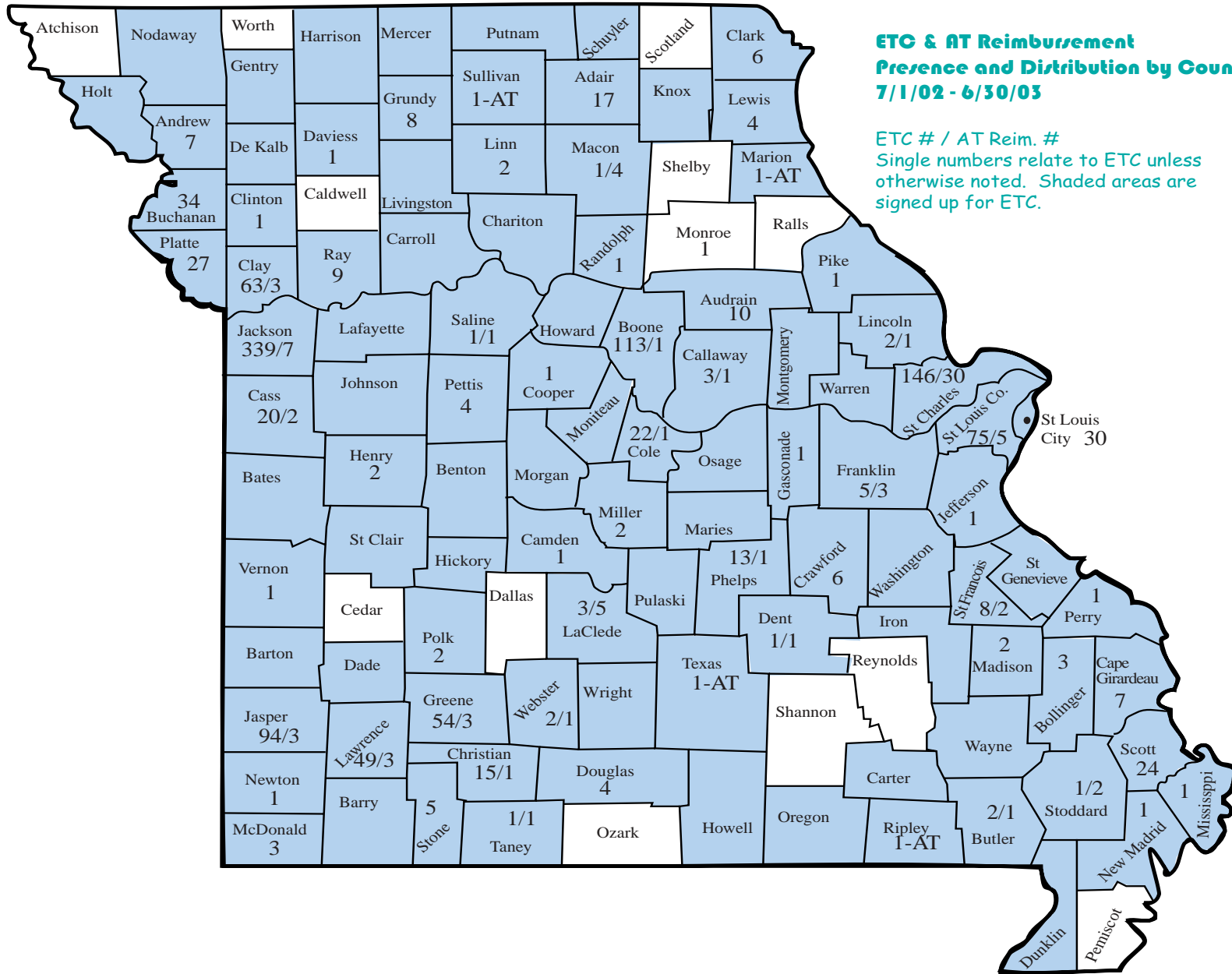


## ETC Program Piece continued...



One of the primary ideas behind the development of the ETC Program was to provide consumers, school districts and agencies around the state with an opportunity to borrow multiple items in order to compare them in different environments (e.g., in school, at home, and in the community). It is strongly believed that by so doing, prudent use of dollars, in particular public dollars, will occur; that there will be appropriate matches of devices to consumers based on evidence, not speculation; and that the assistive technologies purchased will be used by the consumer for many years.

ETC staff perform periodic follow-up with borrowers from around the state. Of particular focus in our follow-up surveying is the outcome achieved through borrowing. In other words, was an appropriate device found for the child or adult and if so, how many other devices were tried before the correct match was found? A southwestern Missouri school district with a high number of current and potential assistive technology users borrowed 74 devices over the course of the past year. At year-end, the school district reports that after conducting device trials using the equipment, they confidently purchased 29 devices ranging from computer access to portable word processors and from augmentative communication to Braille learning aids.



## Assistive Technology Reimbursement Program

### The People Piece

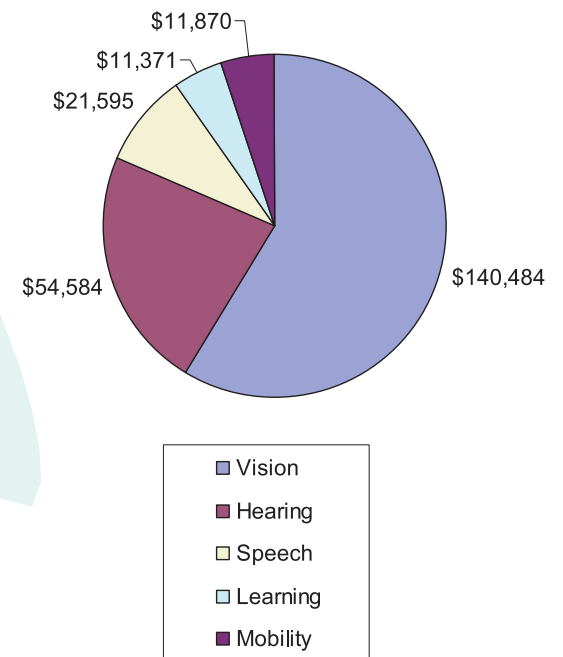
*Like many first-graders, Mikey thinks computers are cool; and his Kansas City area school believes they are integral to effective learning. Mikey's ability to use computers like his fellow students, though, was hindered by his disability and his school's inability to pay for the assistive technology he needs to access the computer. Through the Assistive Technology Reimbursement Program, Mikey's school was able to acquire an Intellikeys adapted keyboard, a range of software tools to enhance the capabilities of the Intellikeys, and a switch that enables Mikey to operate the Intellikeys.*



### The Program Piece

The Assistive Technology Reimbursement Program is MoAT's newest program. Funded by the Department of Elementary & Secondary Education, Division of Special Education, the AT Reimbursement Program helps school districts offset the cost of purchasing assistive technology for students with assistive technology needs written into their Individualized Education Program (IEP).

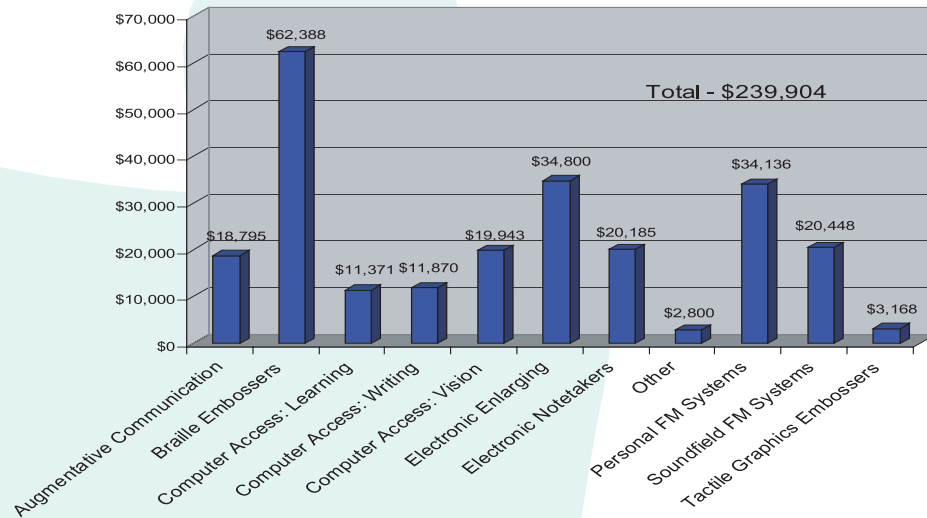
**AT Reimbursement: \$ by Disability Type**



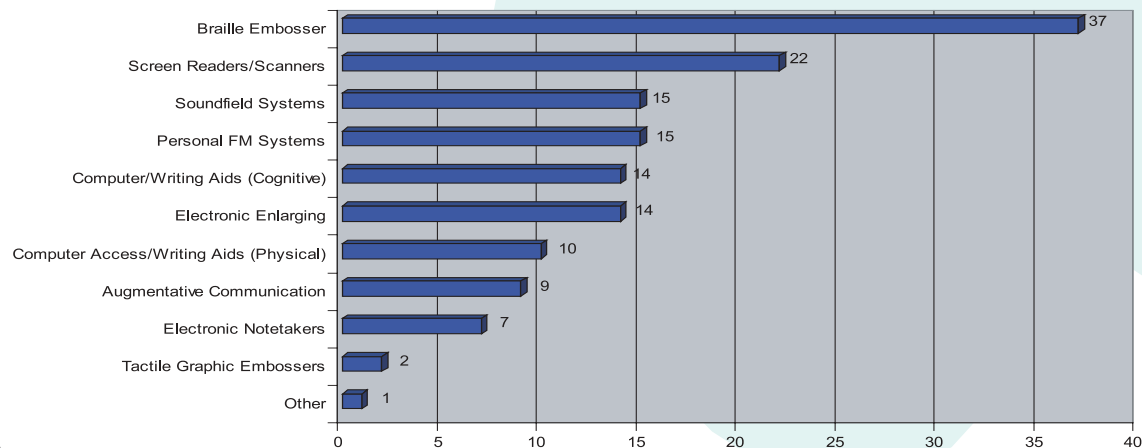
This year, the program received 226 applications from 60 different school districts throughout Missouri.

MoAT was able to fund 88 applications divided among 42 different school districts. The program aims to fund those forms of assistive technology that cost between \$1,000 and \$5,000, items such as braille embossers, augmentative communication aids, computer access systems and personal FM systems.

**AT Reimbursement: Dollars by Device Type**



**AT Purchases for Approved Applications**



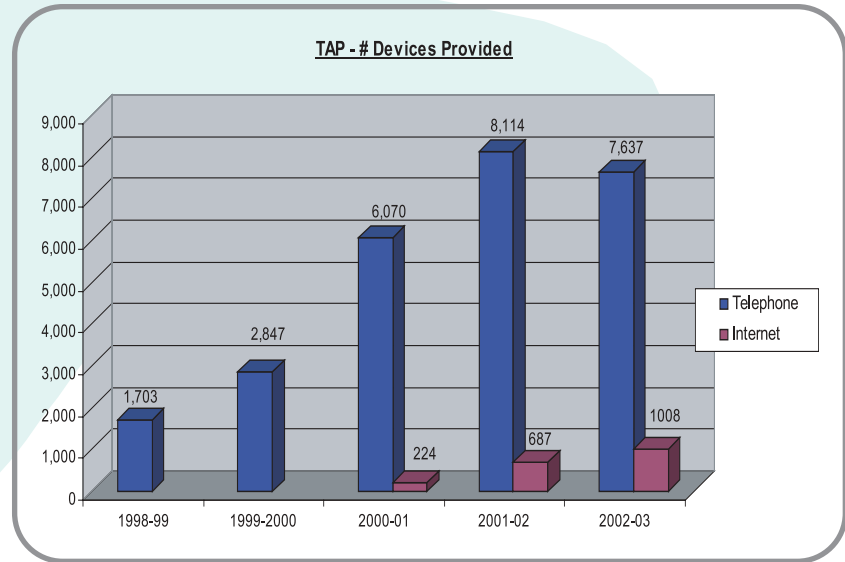
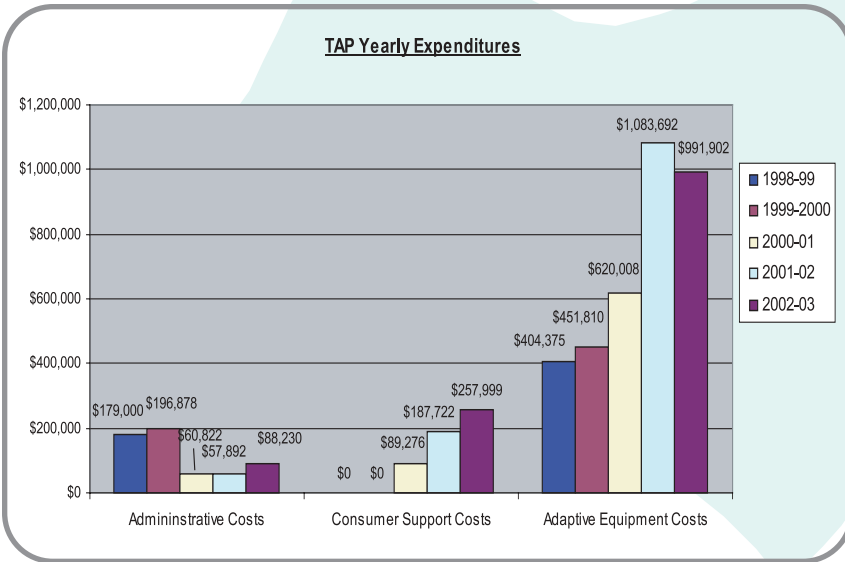
The program was well received by school districts that applied, with several citing the fact that it was refreshing to see new sources of funding in a time when budgets are being reduced and programs eliminated. More importantly, however, is that it opens new opportunities to get assistive technology into the hands of students with disabilities, as in this instance: "We have our purchased Jordy (a form of electronic enlarging) in the classroom and Hannah is so very happy to be using it."

# Telecommunications Access Program (TAP)

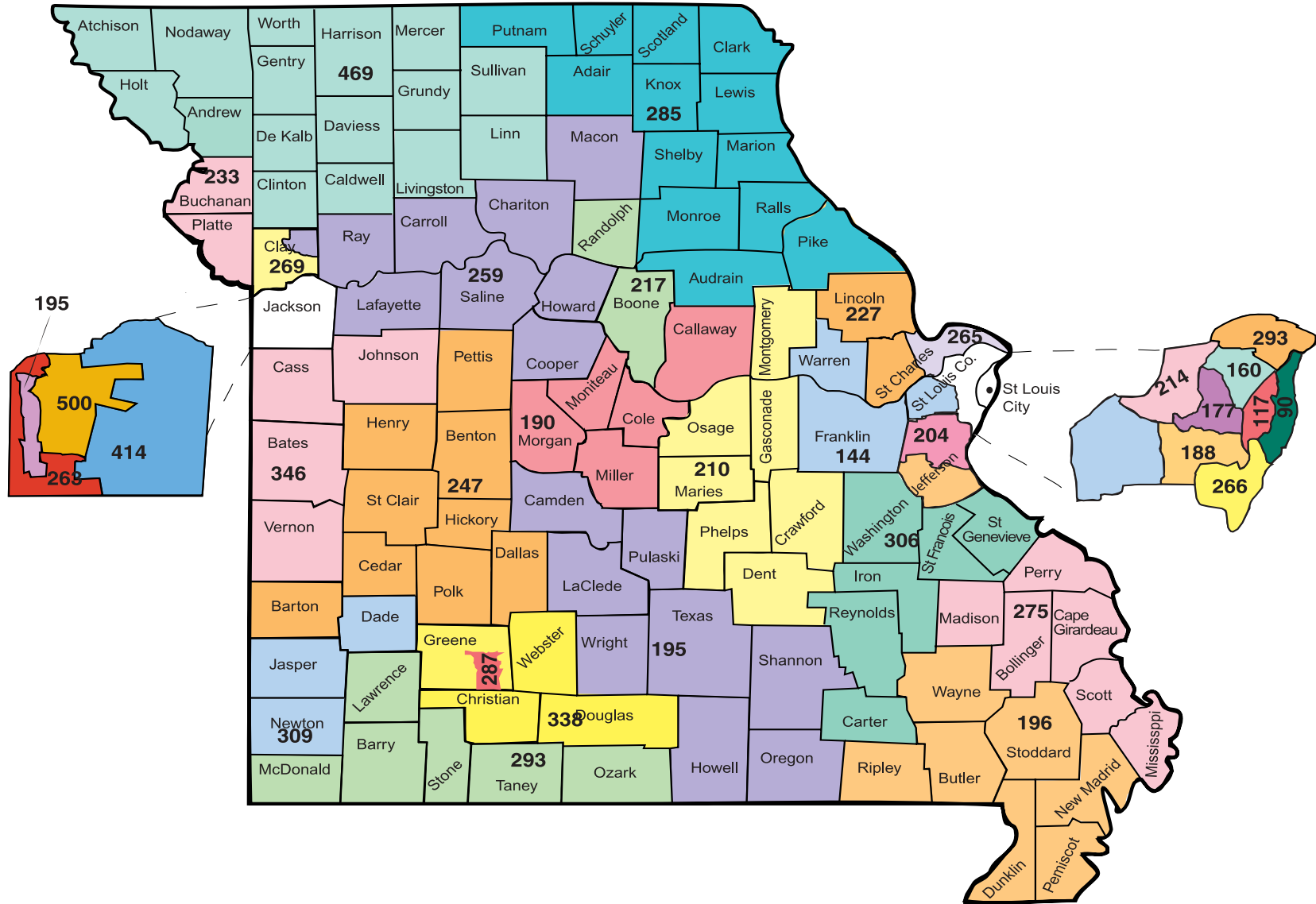
Every day, millions of Missourians use the telephone and internet to make purchases, search for jobs, apply for public services and to communicate with far-away family. The Telecommunications Access Program (TAP) provides adaptive telephone and computer equipment needed for basic access to telephone and internet telecommunication for Missourians with hearing, vision, mobility and other disabilities.

In 2000-2001 MoAT assumed operation of **TAP for Telephone** and initiated **TAP for Internet**. As projected, after several years of steady program growth, TAP for Telephone experienced a "leveling off" of applicants while TAP for Internet, as a new program, saw a 47% increase in the number of devices provided.

A critical component of TAP is the delivery of consumer support to assist individuals with disabilities select the most appropriate adaptive equipment and to assist with installation and use of the equipment provided. While adaptive equipment costs were relatively unchanged from last year, there was a significant increase in consumer support costs caused by the increasing number of complex computer based adaptive equipment provided by TAP for Internet. Administration costs continue to be very low at 6%.



## TAP Equipment Distributed by Senatorial District



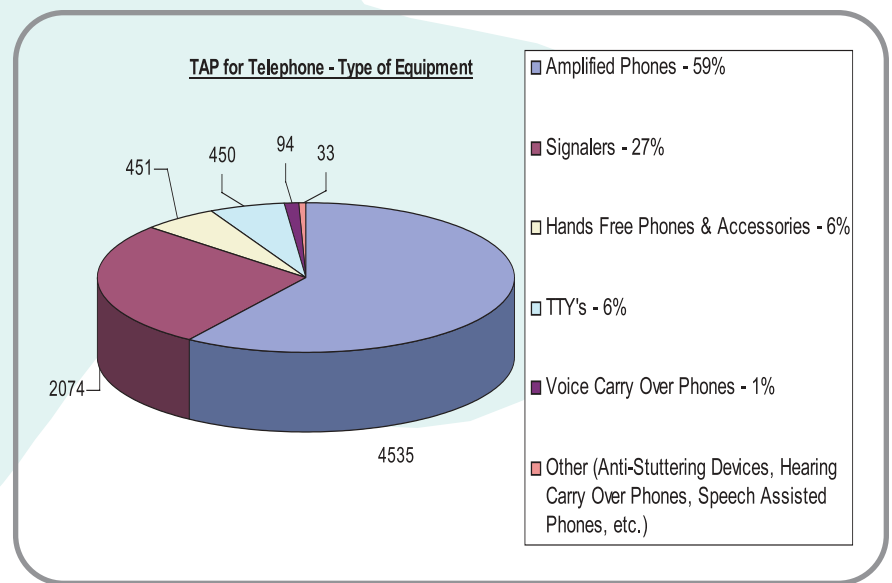
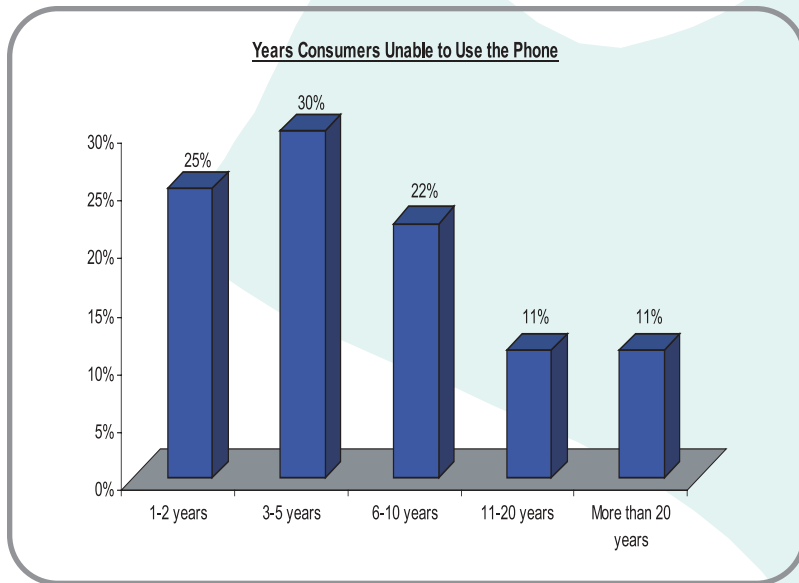
# TAP for Telephone



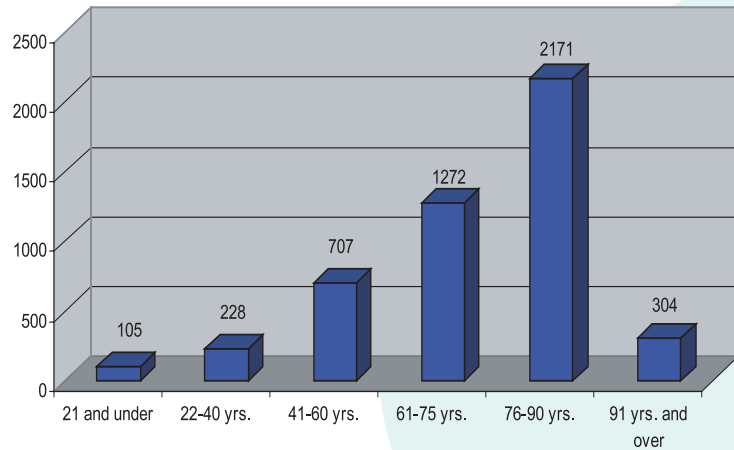
## The People Piece

A rural Center for Independent Living contacted TAP for Telephone regarding a consumer who needed equipment. The consumer had no speech and was low vision. She had good manual dexterity. TAP for Telephone advised that this individual would be a good candidate for Hearing Carry Over services through Relay Missouri. TAP for Telephone would be able to provide the Q90 TTY with External Speakers and a Large Visual Display. The Q90 is specifically set up for Hearing Carry Over (HCO). Because the consumer was unable to read the text she would be typing to the operator, a Large Visual Display was attached to the Q90, which would allow her to read text she was typing and she can now successfully use the telephone.

Equipment provided by TAP for Telephone can overcome years of inability to use the telephone. Forty-four percent of TAP for Telephone consumers indicate they were unable to use the telephone for 6 or more years before receiving adaptive equipment.



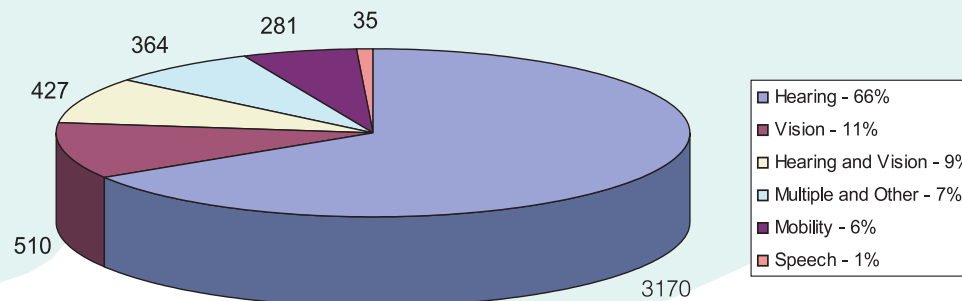
**TAP for Telephone - Age of Recipients**



**The Program Piece**

This year, 7,637 adaptive telephone devices were provided by TAP for Telephone. A network of agencies across the state provides consumer support and receives ongoing training and demonstration equipment from MoAT. This network ensures correct equipment selection through trial use of demonstration devices. Follow-up data from program beneficiaries indicates that 62% relied on the adaptive telephone to make an emergency call and 56% indicated the adaptive telephone allowed them to remain living in their own home.

**TAP for Telephone - Disability of Recipients**





## TAP for Internet



### The People Piece

As is true of many of the "seniors" who apply to TAP-I, **PENNY** has macular degeneration, which is causing her to lose her vision but not her motivation to keep doing all of the activities she loves like tating, reading and talking to her many relatives, and friends via e-mail.

This lively lady uses adaptive technology to perform many daily activities. Included among the technology she uses everyday is her computer magnification software, ZoomText, which allows her to use the Internet and e-mail to keep in touch with her 3 children, 13 grandchildren and 14 great grandchildren, and numerous friends.

To quote Penny, "Thank you and all of those who work with the visually challenged and without the Zoom I would be just an old 78 year old woman with a very dark and lonely day. It is a wonderful program for those who like to keep in touch with the world around, Thanks."



When you walk into **ROGER'S** apartment the first thing you notice are the books that are everywhere. Roger is an avid reader who is particularly fond of the Stephen King and Daniel Kuntz genre. It is easy to get into a lively conversation with Roger about any of the books in his apartment, as he has read them all. It just makes sense that he would like to write his own book.

Being able to write has become a reality, because of the adaptive computer equipment Roger received through TAP-I. He now uses his adaptive hardware and software to access the computer on a daily basis. Because of the difference the adaptive equipment provided through TAP-I has made, Roger can now take advantage of social interaction offered via the internet such as chat rooms; look toward the possibility of attending college and becoming an author; and, increase his independence through internet based businesses such as ordering his groceries on-line.

## The Program Piece

Consumers who received adaptive computer equipment through TAP for Internet report 55% are using the Internet and e-mail to conduct business and 37% are using it to access government services online.

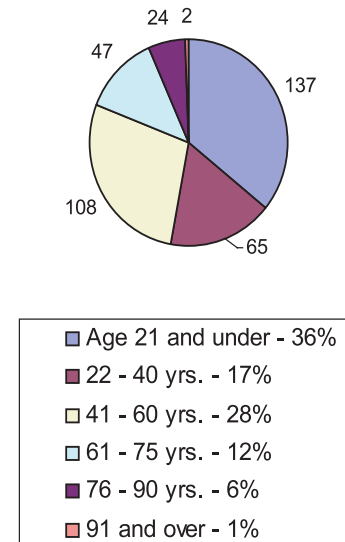
Missouri continues to be the only state in the nation whose telecommunication equipment distribution program includes the adaptive devices needed for Internet access.

TAP for Internet provided 1,008 adaptive computer devices representing 124 different devices. The devices provided fall into four very broad categories including alternative keyboards and pointing devices, software adaptations, speech and braille output and enlargement software.

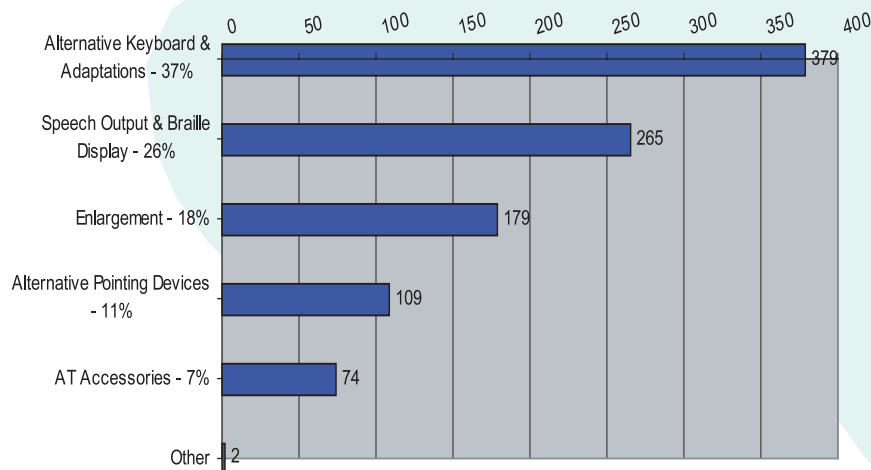
People with vision disabilities continue to be among the most prolific users of the program with 50% of the equipment provided being speech and braille output and enlargement software. Consumers with reading, decoding and/or comprehension disabilities represent 27% of the applicants. People with physical disabilities represent the minority with 18% representation. Given the proportionately larger number of people with physical disabilities, this percentage is expected to increase dramatically.

Because of the wide range of adaptive computer equipment provided through TAP-I, consumer support is a critical factor both for the selection and installation and use of the equipment. Over 400 consumer support sessions were provided this year.

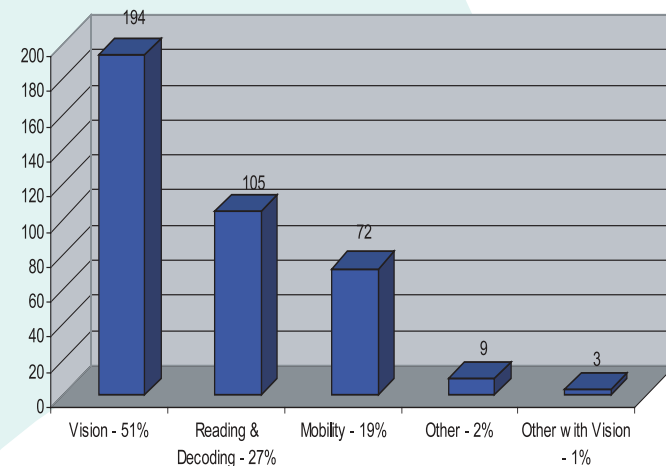
**TAP for Internet - Age of Recipients**



**TAP for Internet - Type of Equipment**



**TAP for Internet - Disability of Recipients**



## Show Me Loans



### The People Piece

*John is 44 years old and lives in Boone County. He is legally blind, but has some partial vision. He wanted to buy a Magni-Cam electronic print enlarger and a scanner so he could read all of his day-to-day print materials at home. He especially wanted the devices to be able to help his children with their schoolwork. He was able to get a discount on the Magni-Cam, but still needed \$520 to purchase it and the scanner. It was just more than was affordable on his monthly disability payments. John applied for and received a \$how-Me Loan, and now enjoys using his new equipment while making monthly loan payments of only \$30.*

*Cinthia and Charles live in their home in Columbia. Their house was built in 1931, and Cinthia, who uses a wheelchair, was frustrated with the home's inaccessible kitchen. There was very little usable counter space; cabinets were up too high for her to reach; she wasn't able to open the windows; and appliances were situated so they were difficult or impossible to use. Cinthia wanted to have the ability to cook, do dishes, and other kitchen chores without having to rely on someone else for help all the time. A \$how-Me Loan was approved with affordable monthly payments that allowed the couple to make access improvements so Cinthia can be much more independent in her home.*



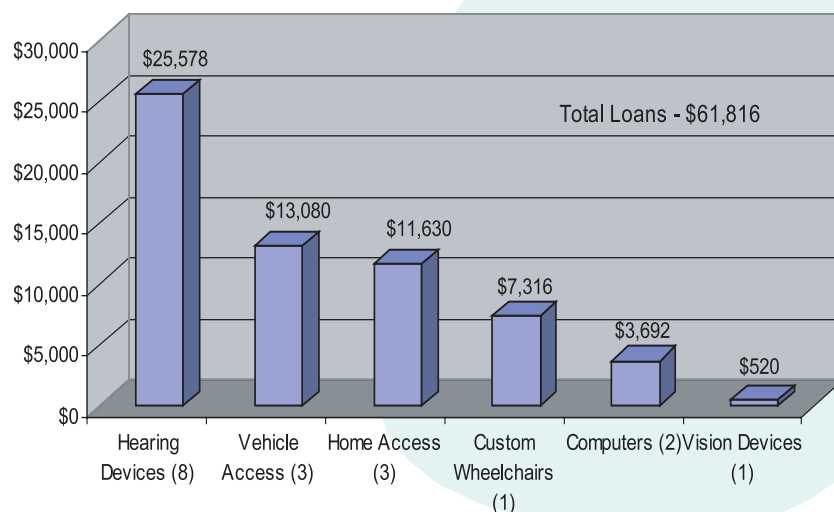
## The Program Piece

**Show-Me Loans** is Missouri's new low-interest loan program that helps persons with disabilities to purchase assistive technology. Borrowers have been able to improve independence for themselves or family members through the loan program with interest rates averaging 3.1%. The program can provide loans for any type of assistive technology device or equipment, or for making access improvements to homes or vehicles. During 2002-03, Show-Me Loans received 31 applications which were reviewed by a consumer majority loan committee. The average time needed to

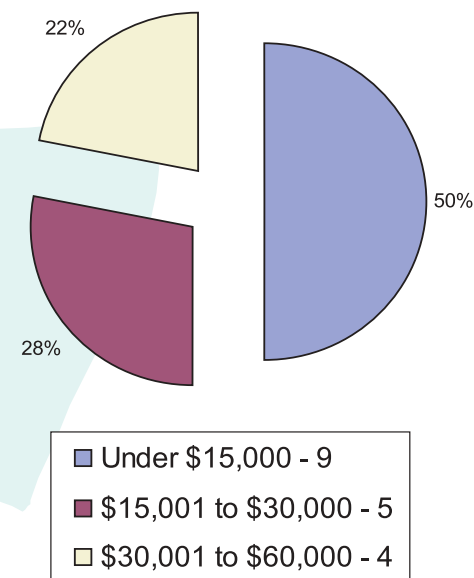
process & review applications was 23 days. The program approved \$61,816 in loans for 18 Missouri families. Eight borrowers purchased hearing aids, 3 purchased wheelchair lifts for vehicles, 2 bought wheelchair ramps, 2 purchased computers, and others obtained home access modifications, an assistive listening system, a customized wheelchair and an electronic print enlarging device. The average amount loaned was \$3,434 with a range of \$520 to \$9,859. Terms of re-payment ranged from 18 to 60 months with an average of 37 months.

Even though half of the borrowers had an annual income of less than \$15,000 there were no defaults on loans. During the year, borrowers repaid a total of \$20,462 in principal and interest.

**Show Me Loans - AT by Dollars Loaned**



**Annual Income of Approved Borrowers**



## Swap 'n Shop



*They were able to attach this to a hooyer lift and now can use this for weight bearing exercises as well as a way to get out of the sitting position at times. The consumer states that this was the first time they had ever seen this but it does the job better than anything else they have found and they saved \$150!*

## The Program Piece

In fact, Missouri Assistive Technology helped citizens save **\$370,748** through the Swap N' Shop program, an equipment exchange program that allows people with disabilities to obtain devices from individuals in the state who no longer use them. The Swap n' Shop program received 124 new equipment listings while

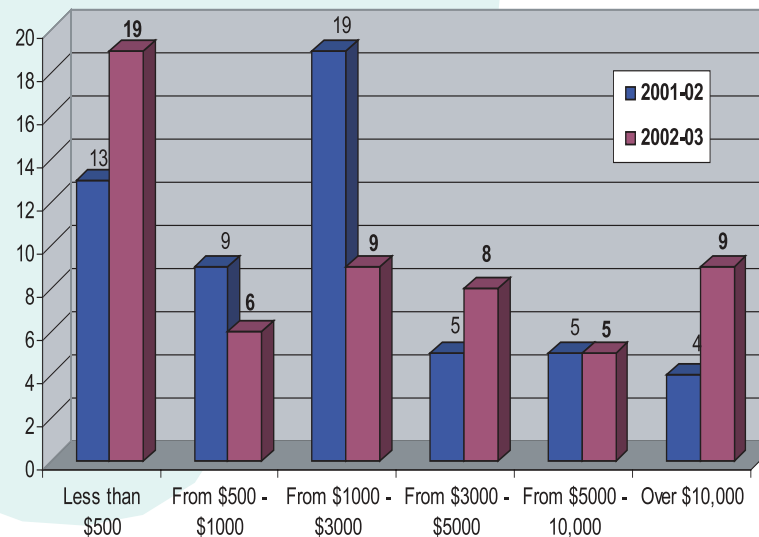
89 new consumers were able to place an ad. All types of assistive technologies were listed including accessible vehicles, porch and stair lifts, all types of mobility aids such as canes, and wheelchairs allowing other consumers from around the state to purchase used assistive technology at a reduced price.

## The People Piece

*A central Missouri school district initially borrowed several different types of CCTVs from the ETC program to determine the most appropriate device. The CCTV was so much easier to use than a hand-held magnifier. They feel fortunate to have found exactly what they needed on the Swap 'n Shop, and saved a thousand dollars too!*

*An individual from southern Missouri had previously found and purchased an accessible van off of the Swap n' Shop program a few years ago, and was looking through the listings once again. They found a parachute harness.*

Swap 'n Shop - Price Range of Transferred Equipment



## Kids Assistive Technology Program (KAT)

### The People Piece

A mother in St. Louis was worried about having to carry 12-year old Marty and his wheelchair up and down stairs in front



of their home. Carrying Marty, who has cerebral palsy, was dangerous for both him and his mother. Since the house had a high porch and there was limited yard space, it was clear that a wheelchair lift would be a better solution for the family than a ramp.

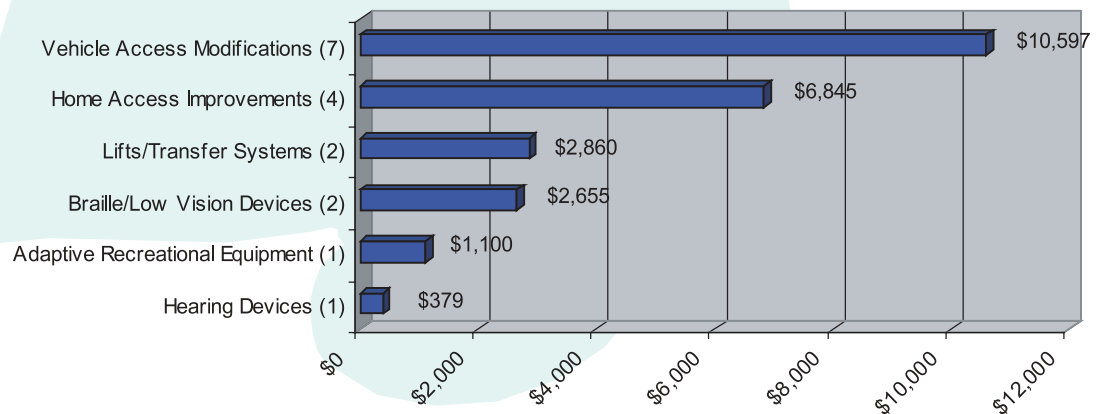
But Marty's mom, a single mother of five, could not afford a lift costing several thousand dollars. The KAT program was able to provide most of the needed funding. Now even Marty's brothers and sisters can operate the lift and don't have to wait for help every time Marty wants to go outside or come in.

### The Program Piece

For three years, families of children with disabilities have obtained assistive

technology through the KAT program. Program funds have come from the Department of Health and Senior Services - Bureau of Special Health Care Needs. While fewer KAT funds were available than in previous years, the program was still able to help 18 Missouri children. MoAT was able to utilize \$24,438 in KAT funds to leverage another \$29,378 in other funding to provide a total of \$53,814 in devices and equipment.

KAT - Dollars Expended by Type of AT



## Missouri Disability legislative listserv

Missouri's 2003 legislative year took many twists and turns including two special sessions. Persons with disabilities and other disability advocates needed up-to-date information on the status of disability-related legislation and budget issues. MoAT's Missouri Disability Legislative Listserv helped them meet this need. More than 330 individuals and organizations subscribed to the Listserv at no cost, and provided the legislative information to hundreds of other Missourians with disabilities.

"I have appreciated the complete and up-to-date info. I have forwarded a lot of the emails to my son's caseworkers."  
— Parent of a child with a disability

"There is not much more I can ask from you...You did an awesome job of informing many of us on the legislative actions and bills... Keep up the good work"  
— School special education administrator

"MoAT's listserv is considered one of the best resources for up to date Missouri legislative issues. It is clear and concise—all that is needed."  
— Director of a center for independent living

"The information provided is concise while offering all the important highlights. It is perfect for someone like myself that does not have a lot of time to review tons of information on the various issues. Anytime I have needed additional information I have been able to contact MoAT staff and get the information I needed."  
— Director of a community non-profit organization

"I think you do an excellent job of tracking legislative issues...I don't have the time (or the know how) to keep on top of all of the different issues being considered each session, so your reports are invaluable for keeping me up to date and informed. I subscribe to another list that does not seem to track anywhere near the number of legislative issues you track. Keep up the good work, we certainly appreciate it!"  
— Assistant director of a center for independent living

**The Mission of the Missouri Assistive Technology  
Advisory Council is to increase access to assistive technology  
for Missourians with disabilities.**

**Council members during 2002 - 2003:**

**Consumer Representatives**

Teddi Brace, Chairperson  
Rita Lynch, Chairperson Elect  
Shari LaRoussa, Past Chair  
Karen Collier  
Chris Craig  
Marnie Gustafson  
Neil Harms  
Scott Higdon  
Dick Hosty  
Jim Jordan  
Deana O'Brien  
Rhonda Triller

**Legislative Representatives**

Senator Kenneth Jacob  
Representative - vacant

**Agency Representatives**

Jim Brinkman - *Rehab. Serv. for the Blind*  
Aurita Prince Caldwell - *Health & Sr. Services*  
Jim Casey - *Insurance*  
Melodie Friedebach - *Special Education*  
Dolores Hampton - *DD Planning Council*  
Ed Kniest - *Medical Services*  
Nancy Nickolaus - *Mental Health*  
Elaine Reiter - *AARP*  
Vacant - *Vocational Rehabilitation*



In keeping with statutory requirements, the Missouri Assistive Technology Council is pleased to provide this report on the Council's services and programs. Every attempt has been made to provide timely and comprehensive information in a cost effective manner by using existing staff resources.

Alternate formats are available upon request and an accessible electronic version is available at [www.dolir.mo.gov/matp/](http://www.dolir.mo.gov/matp/).

Photography by Bob LaRoussa and Tom Olin



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